

Structural Position of Negation in Surati Gujarati: A view on the Negated Auxiliaries

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- Background
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- Empirical Landscape & Generalizations
- Analysis
- Conclusion

Background

- Gujarati is an Indo-Aryan language spoken in the Gujarat state of India. Surati Gujarati, the variety I focus on here, is a dialect of Gujarati spoken mainly in Surat and the neighboring areas of Surat in the state of Gujarat.
- I conducted field work in the city of Surat to collect data on Surati Gujarati. The field study was conducted on twenty-five language consultants, it consisted of fourteen female and eleven male speakers. Their age groups ranged between 20-70 years.



Figure: Gujarat (WALS online)

- What is *Negation*?

In logic, negation is a one-place operator that reverses the truth-value of a proposition. Negation applied to sentence that is false results in a true statement and vice versa. Thus, (1) is true in exactly the situations in which (2) is false.

(Penka 2015)

(1) It is raining

(2) It is not raining

- There are three ways to express negation in Surati Gujarati:
 - (i) *nho-* (Past Tense)
 - (ii) *nathi* (Present Tense)
 - (iii) *nahi* (Default)

- *nho-* is only used in the past tense context, *nathi* is used only in the present tense context, and *nahi* is the elsewhere form of negation and can be used in every context.

- NEGP is above ASPP in Surati Gujarati.
- *nahi* and the negated auxiliaries (*nho-* & *nathi*) occupy different positions on the structural spine in Surati Gujarati. *nahi* is in the NEG° position and negated auxiliaries occupy the T° position.
- The distribution of negative markers determine their interaction with other components of grammar and thereby result in mapping of a particular semantic result. E.g., Interpretation of tense in this case.

Empirical Generalizations: Bird eye View

	NEGATIVE PAR-TICLE	PROPERTY
1.	<i>nho-</i>	[+PAST],[+NEG]
2.	<i>nathi</i>	[+PRES],[+NEG]
3.	<i>nahi</i>	[-TENSE], [+NEG]

Table: Properties of Negation

NEGATION	COMBINING ELEMENT	OUTPUT	EXAMPLE
<i>nho-</i>	AUX	*	(7)
<i>nathi</i>	AUX	*	(12)
<i>nahi</i>	AUX	✓	(19) & (20)

Table: Negation & Auxiliary

Questions!

Now let us look at each form carefully!

- **Property 1:** The negative particle (*nho-*) can agree both in the post-verbal and in the pre-verbal position with the subject ‘Shahrukh’ with respect to number and gender and thereby shows masculine singular morphology.

(3) **shahrukh** gaadi (**nho-to**) laav-yo (nho-to)
Shahrukh.M.SG-NOM car.F.SG NEG-M.SG bring-M.SG NEG-M.SG
‘Shahrukh had not got the car.’ (It was **Shahrukh** who did not get the car)

- Only in the pre-verbal position, the negative particle can agree with the object *gaadi* (‘car’) with respect to the number and gender features.

(4) shahrukh **gaadi** (**nho-ti**) laav-yo (*nhoti)
Shahrukh.M.SG-NOM car.F.SG NEG-F.SG bring-M.SG NEG-F.SG
‘Shahrukh had not got the car.’ (It was **the car** that Shahrukh did not get)

Non-Agreeing Negation: *nathi* (Present Tense)

- **Property 1:** *nathi* is the only negative particle which can be exclusively used in the present tense context.

(8) shahrukh gaadi **nathi** laav-to
Shahrukh.3P.M.SG-NOM car.F.SG NEG.PRES bring-IPFV.M.SG
'Shahrukh is not bringing the car.'

(9) *shahrukh gaadi **nathi** laav-elo
Shahrukh.3P.M.SG-NOM car.F.SG NEG.PRES bring-M.SG.PAST
'Shahrukh did not bring the car.'

(10) *shahrukh gaadi **nathi** laav-se
Shahrukh.3P.M.SG-NOM car.F.SG NEG.PRES bring-3P.FUT
'Shahrukh will not bring the car.'

- **Property 2:** *nathi* can occur both in the pre-verbal and in the post-verbal position.

(11) shahrukh gaadi (**nathi**) laav-yo (**nathi**)
 Shahrukh.3P.M.SG-NOM car.F.SG NEG.PRES bring-PERF.M.SG NEG.PRES
 ‘Shahrukh has not brought the car.’

- **Property 3:** Auxiliary and *nathi* are in complementary distribution

(12) *shahrukh gaadi (**nathi**) laav-yo
 Shahrukh.3P.M.SG-NOM car.F.SG NEG.PRES bring-PFV.M.SG
 (che)
 be.PRES.3P.SG
 ‘Shahrukh has (not) brought the car.’

- **Property 1:** *nahi* can be used in all present, past and future tense contexts. This is illustrated in (13)-(15).

(13) shahrukh gaadi **nahi** laav-e
Shahrukh.3P.M.SG-NOM car.F.SG NEG bring-IPFV.3P
'Shahrukh does not bring the car.'

(14) shahrukh gaadi **nahi** laav-elo
Shahrukh.3P.M.SG-NOM car.F.SG NEG bring-PAST.M.SG
'Shahrukh did not bring the car.'

(15) shahrukh gaadi **nahi** laav-se
Shahrukh.3P.M.SG-NOM car.F.SG NEG bring-3P.FUT
'Shahrukh will not bring the car.'

- **Property 2:** *nahi* can also occur in the post-verbal position. This is seen in sentences (16)-(18).²

(16) shahrukh gaadi laav-e **nahi**
 Shahrukh.3P.M.SG-NOM car.F.SG bring-IPFV.3P NEG
 'Shahrukh does not bring the car.'

(17) shahrukh gaadi laav-elo **nahi**
 Shahrukh.3P.M.SG-NOM car.F.SG bring-PAST.M.SG NEG
 'Shahrukh did not bring the car.'

(18) shahrukh gaadi laav-se **nahi**
 Shahrukh.3P.M.SG-NOM car.F.SG bring-3P.FUT NEG
 'Shahrukh will not bring the car.'

²The change in the position in the word order does not effect the interpretation in any way.

- **Property 3:** *nahi* and auxiliaries can co-occur unlike *nho-* and *nathi* which were in complementary distribution with the auxiliaries.

(19) shahrukh gaadi **nahi** laav-yo **ha-to**
Shahrukh.3P.M.SG-NOM car.F.SG NEG bring-PFV.M.SG be-PAST.M.SG
'Shahrukh had not brought the car.'

(20) shahrukh gaadi **nahi** laav-yo **ha-se**
Shahrukh.3P.M.SG-NOM car.F.SG NEG bring-PFV.M.SG be-FUT.3P
'Shahrukh will not have brought the car.'

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Table: Properties of Negation

NEGATION	COMBINING ELEMENT	OUTPUT
<i>nho-</i>	AUX	*
<i>nathi</i>	AUX	*
<i>nahi</i>	AUX	✓

Table: Negation & Auxiliary

Questions!

- NEGP is above ASPP in Surati Gujarati.
- *nahi* and the negated auxiliaries (*nho-* & *nathi*) occupy different positions on the structural spine in Surati Gujarati. *nahi* is in the NEG° position and negated auxiliaries occupy the T° position.
- I show that the distribution of negative markers determine their interaction with other components of grammar and thereby result in mapping of a particular semantic result. E.g., Interpretation of tense in this case.

Working Hypothesis

NEG is higher than Asp.

- We use two overt elements to track their relative surface positions. A subject NPI, which needs to be in the scope of negation at LF. The other is a fixed point, the adverb *hammesha* ‘always’. *hammesha* is a fixed point because adverbs are not believed to raise or lower covertly.
- If we follow the Cinque hierarchy, the adverb *hammesha* (‘always’) adjoins to the Asp-adjunct position.^{3,4}

(21) ram (***hammesha**) kadaach (**hammesha**) varamvaar (***hammesha**)
Ram always possibly always frequently always
gaadi ochin-to (***hammesha**) dheeme nahi laav-yo
car.F.SG suddenly-M.SG always slowly NEG bring-PFV.M.SG
‘Ram did not possibly always frequently suddenly got the car slowly.’

³ Compare Cinque (1999), this assumes that *varamvaar* is a vP adjunct and vP is complement of Asp.

⁴ I do not need to determine the absolute positions occupied by the adverb for the argument to hold, for this is an argument about relative positions.

- Here, we observe that the negation takes scope over the adverb *hammesha* ('always') i.e., it occupies a higher position than the adverb and the subject NPI.

(22) **Context:** There were ten students in a class and they were expected to finish all the assignments but not even one boy completed all his assignments.

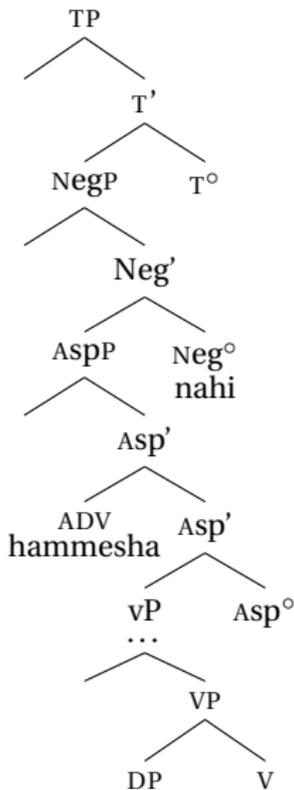
(23) ek-pan chokra-e hammesha kaam nahi/nho-tu kar-yu
one-even boy.M.SG-ERG always work NEG do-PFV
'Not even one boy did the work all the time.' [NEG > ANY > ALWAYS]

- The sentence in (23) lacks the ALWAYS > NEG > ANY reading ('Every time no boy did the work'). The sentence only has one reading where the negation scopes over the adverb and the subject NPI.⁵
- If negation is below Asp, the interpretation NEG > ANY > ALWAYS in (23) cannot be easily derived.

⁵English too has the differences in scope but these differences in scope order are read off the surface order unlike in Surati Gujarati.

- (i) Bill does not always work [NEG > ALWAYS]
(ii) Bill always does not work [ALWAYS > NEG]

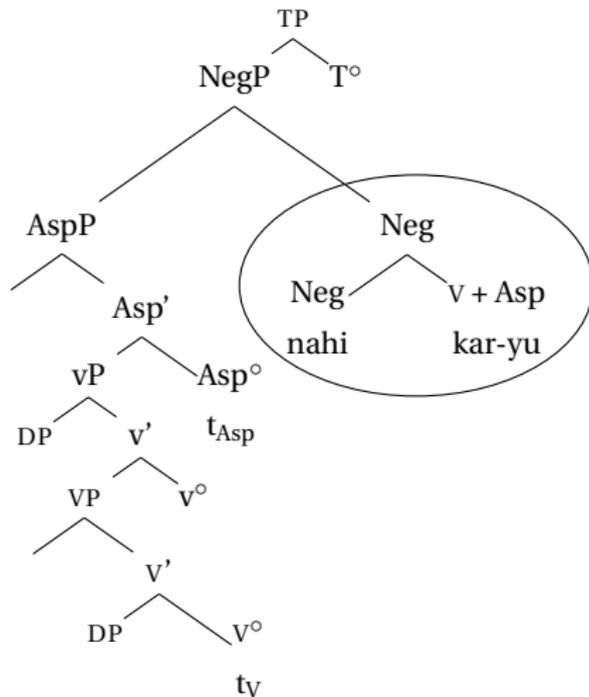
- (24) ek-pan chokra-e hammersha kaam kar-yu nahi
 one-even boy.M.SG-ERG always work do-PFV NEG
 'Not even one boy did the work all the time.' [NEG > ANY > ALWAYS]



Questions!

- My proposal hinges on Homer & Bhatt (2019) who in turn build on Kumar (2006). I propose that the negative particles are right attached with V rightward-moving around it.
- Further, I propose that V forms a complex head with the negative particle and the intermediate Asp, by head movement (Travis 1984, Koopman 1984, Baker 1985, 1988, Harizanov & Gribanova 2019). This tree has the negative particle as the head of NegP, rather than as a phrase in the specifier of NegP.

- (25) shahrukh-e kaam nahi kar-yu
 Shahrukh.M.SG-ERG work NEG do-PFV.N.SG
 'Shahrukh did not do the work.'



- The language does not allow the use of a lower adverb *dheeme* ('slowly') between the negative particle and the main verb.

(26) shahrukh-e kaam **dheeme** nahi kar-yu
Shahrukh.M.SG-ERG work slowly NEG do-PFV
'Shahrukh did not work slowly.'

(27) *shahrukh-e kaam nahi **dheeme** kar-yu
Shahrukh.M.SG-ERG work NEG slowly do-PFV
'Shahrukh did not work slowly.'

- This is exactly what the analysis predicts. Thus, I take the ungrammaticality of sentence (27) to indicate that the negative particle and V form a complex head via head movement.

- Another piece of evidence for the movement of the V + Asp cluster is provided by unaltered scope facts in pre-verbal & post-verbal negation.

(28) ek-pan chokra-e hammersha kaam kar-yu **nahi**
one-even boy.M.SG-ERG always work do-PFV NEG
'Not even one boy did the work all the time.' [NEG > ANY > ALWAYS]

(29) ek-pan chokra-e hammersha kaam **nahi** kar-yu
one-even boy.M.SG-ERG always work NEG do-PFV
'Not even one boy did the work all the time.' [NEG > ANY > ALWAYS]

- These scope facts show us that it is not the negation that moves around but the v + Asp complex that moves around. Thereby giving us an argument against theories that argue for movement of negation.

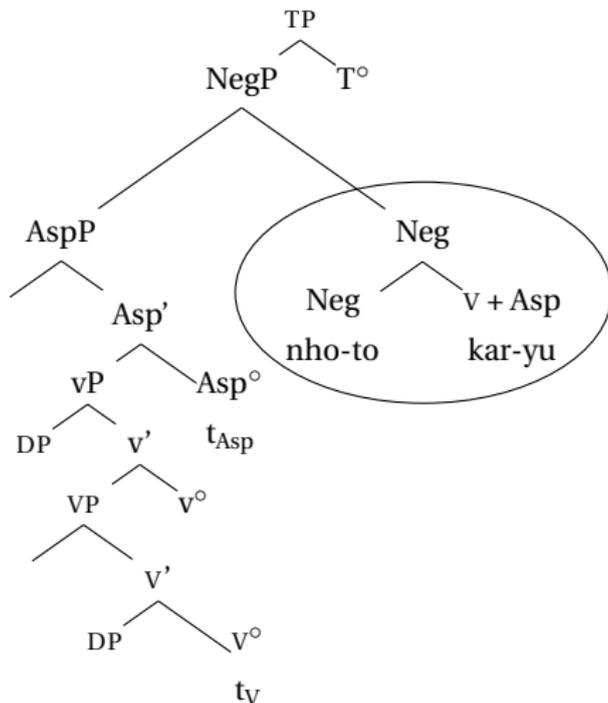
Questions!

The structure for sentence (25) does not account for the fact that the negated auxiliaries cannot occur with past tense and present tense *be* auxiliaries. I illustrate this in constructions in (7) and (12) repeated in (30) & (31), respectively.

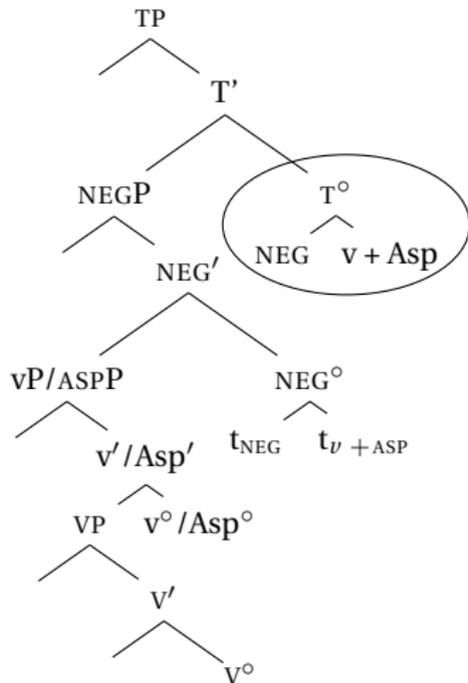
(30) ***shahrukh** gaadi **nho-to** laav-yo ha-to
Shahrukh.3P.M.SG-NOM car.F.SG NEG-M.SG bring-M.SG be-PAST.M.SG
'Shahrukh did not bring the car.'

(31) *shahrukh gaadi **nathi** laav-yo che
Shahrukh.3P.M.SG-NOM car.F.SG NEG.PRES bring-PFV.M.SG be.PRES.3P.SG
'Shahrukh has (not) brought the car.'

- (32) **shahrukh** gaadi **nho-to** laav-yo (*hato)
 Shahrukh.3P.M.SG-NOM car.F.SG NEG-PAST bring-PFV.M.SG be.PAST
 'Shahrukh did not bring the car.'



- (33) shahrukh-e kaam nho-tu kar-yu
 Shahrukh.M.SG-ERG work NEG-E.SG do-PFV.N.SG
 'Shahrukh hadn't done the work.'



Evidence for Movement to T: Ellipsis

When we ellide the tense node as in (34), it is not possible to use *nho-* and *nathi*. The use of *nahi* is obligatory.^{6,7}

- (34) pomfret bau-vaar khaadhi che pan bombay-duck koi-divas
Pomfret many-times eat-PFV.E.SG AUX but Bombay-duck ever
nahi/*nathi/*nhoti △
NEG/NEG.PRES/NEG.PAST
'I have eaten pomfret many times, but not ever bombay-duck.'

- Use of *nahi* is also obligatory in sluicing (a type of TP ellipsis) constructions like e.g. *John kissed someone but I don't know who*.
- The example in (34), not only provides evidence for the movement of the NEG but also provides in argument in favor of *nahi* and the negated auxiliaries (*nho-* & *nathi*) being in different structural positions.

⁶In (34), △ marks the ellipsis site.

⁷I thank Neil Banerjee for bringing the data point in (34) to my attention.

- In this presentation, I show that although negation seems to be lower on the clausal spine on the surface level, the scope and ellipsis facts suggests that negation is above Asp in Surati Gujarati.
- I also show that *nahi* and the negated auxiliaries (*nho-* & *nathi*) are not in the same structural positions. Further, *nahi* is in the NEG° and the negated auxiliaries are in the T° .
- Thus, the data and the analysis direct us towards a deeper question on syntax-semantics mapping of negation. I show that the distribution of negative markers determine their interaction with other components of grammar and thereby result in mapping of a particular semantic result.

Selected References

- Baker, Mark C. 1985. The mirror principle and morphosyntactic explanation. *Linguistic Inquiry* 16(3). 373–416.
- Baker, Mark C. 1988. *Incorporation: A theory of grammatical function changing*. University of Chicago Press.
- Cinque, G. (1999). *Adverbs and functional heads: A cross-linguistic perspective*. Oxford University Press on Demand.
- Harizanov, Boris Vera Griбанова. 2019. Whither head movement? *Natural Language and Linguistic Theory* 37(2). 461–522. DOI: <https://doi.org/10.1007/s11049-018-9420-5>
- Homer, V., Bhatt, R. (2020). Restructuring and the scope of negation in Hindi-Urdu. *Glossa: a journal of general linguistics*, 5(1).
- Koopman, Hilda. 1984. *The syntax of verbs: From verb-movement rules in the Kru languages to universal grammar*. Dordrecht: Foris Publications.
- Ramchand, G. C. (2004). Two types of negation in Bengali. In *Clause structure in South Asian languages* (pp. 39-66). Springer, Dordrecht.
- Travis, Lisa. 1984. *Parameters and effects of word order variation*. Cambridge, MA: MIT dissertation.

- Sentential negation applies to the full clauses or complete propositions. A hallmark of sentential negation in Gujarati is that it can license subject NPIs.⁸
- Both the *nho-* and *nathi* forms of negation can license Subject NPIs.
- **Subject NPI: (*nho-*)**

(35) **ek-pan** chokro school *nho-to* *gayo*
One-even boy school NEG.PAST.M.SG go.PFV.M.SG
Not even one boy went to the school

- **Subject NPI: (*nathi*)**

(36) **ek-pan** chokro school *nathi* *gayo*
One-even boy school NEG.PRES.M.SG go.PFV.M.SG
Not even one boy has been to the school

⁸This is one of the syntactic environments where we expect auxiliary deletion in Hindi-Urdu. 